Application No.: 09/349,105

Attorney Docket No.: 05725.0441

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

- 1. (Previously Presented) A ready-to-use composition for dyeing keratin fibers, comprising:
- (i) at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below, and
  - (ii) at least one thickening polymer;
- (a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - \begin{pmatrix} R_3 \\ R_3 \end{pmatrix} - N \begin{pmatrix} R_1 \\ R_2 \end{pmatrix}$$
 (I)

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH<sub>2</sub> radicals; or

R<sub>1</sub> and R<sub>2</sub> may form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl

## radicals;

 $R_3$  and  $R_3$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:

R <sub>4</sub> :	N A₂	R-N R <sub>4</sub> A <sub>3</sub>
R_+ N	N-N+ R <sub>4</sub> N R <sub>4</sub> A <sub>5</sub>	N-N+ N-N+ R <sub>4</sub> A <sub>8</sub>
R <sub>4</sub> R <sub>4</sub> R <sub>4</sub> R <sub>4</sub> R <sub>4</sub> R <sub>4</sub> A <sub>7</sub>	R. A.	R <sub>4</sub> N <sub>N</sub> R <sub>4</sub> A <sub>9</sub>
N-N+R4 A10	R <sub>5</sub> ————————————————————————————————————	R <sub>4</sub> O.N+ R <sub>4</sub> A <sub>12</sub>
=N+ R <sub>4</sub> A <sub>13</sub>	NH RA	N N RA

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_5$  is chosen from  $C_1\text{-}C_4$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

**(b)** wherein said compounds of formula (II) are chosen from compounds of formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \\ \end{array}$$

$$R_7$$

$$R_7$$

$$R_7$$

$$R_7$$

$$R_7$$

in which:

 $R_6$  is chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures B<sub>1</sub> to B<sub>6</sub> below:

$$R_{10}$$
 $R_{10}$ 
 $R$ 

in which:

 $R_{10}$  is chosen from  $C_1\text{-}C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X \cdot R_{15}$$

$$R_{15}$$

$$R_{16}$$
(III)

in which:

R<sub>13</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, halogen atoms and an amino radical,

R<sub>14</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

and

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

and

- (d) wherein said at least one thickening polymer is chosen from:
- (ii)<sub>1</sub> nonionic guar gums;
- (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
- (ii)<sub>3</sub> gums derived from plant exudates;
- (ii)<sub>4</sub> pectins;

- (ii)<sub>5</sub> alginates;
- (ii)<sub>6</sub> starches; and
- (ii)<sub>7</sub> hydroxyalkylcelluloses and carboxyalkylcelluloses, with the provisos that
- (1) when said at least one cationic direct dye is chosen from compounds of formula (I) wherein:
  - both D's are simultaneously nitrogen atoms,
  - R<sub>3</sub> and R'<sub>3</sub> are simultaneously hydrogen atoms,
  - $R_1$  and  $R_2$  are simultaneously unsubstituted methyl radicals, and
  - A is  $A_6$  wherein  $R_4$  is an unsubstituted methyl radical, or  $^{\circ}$
- (2) when said at least one cationic direct dye is chosen from compounds of formula (III) wherein:
  - $D_1$  and  $D_2$  are simultaneously nitrogen atoms,
  - m is zero,
  - R<sub>15</sub> is a hydrogen atom,
  - R<sub>13</sub> is a dimethylamino radical, and
  - E is E<sub>8</sub> wherein R' is an unsubstituted methyl group,

then the at least one thickening polymer is not chosen from at least one nonionic guar gum; and

with the further provisos that

(1) when said at least one cationic direct dye is chosen from compounds of

## formula (I) wherein:

- both D's are simultaneously nitrogen atoms, and
- A is chosen from A<sub>4</sub> and A<sub>13</sub>, or
- (2) when said at least one cationic direct dye is chosen from compounds of formula (III) wherein:
  - D<sub>1</sub> and D<sub>2</sub> are simultaneously nitrogen atoms,
  - m is zero, and
  - E is chosen from  $E_1$ ,  $E_2$ , and  $E_7$ ,

then said at least one thickening polymer is not chosen from hydroxyalkylcelluloses and carboxyalkylcelluloses.

- 2. (Original) The composition according to Claim 1, wherein said keratin fibers are human keratin fibers.
- 3. (Original) The composition according to Claim 2, wherein said human keratin fibers are hair.
- 4 (Original) The composition according to Claim 1, wherein in formulae (I), (III), (III) and (III'), the  $C_1$ - $C_4$  alkyl radicals and the  $C_1$ - $C_4$  alkoxy radicals are chosen from methyl, ethyl, butyl, methoxy and ethoxy radicals.
- 5. (Original) The composition according to Claim 1, wherein said anions are chosen from chloride, methyl sulfate and acetate.
  - 6. (Original) The composition according to Claim 1, wherein said halogen

atoms of  $R_3$ ,  $R_3$ ,  $R_8$ ,  $R_9$ ,  $R_{13}$ , and  $R_{15}$  are chosen from bromine, chlorine, iodine, and fluorine.

- 7. (Canceled)
- 8. (Currently Amended) The composition according to Claim 1 Claim 7, wherein said biopolysaccharide gums of microbial origin are chosen from scleroglucan gum and xanthan gum.
- 9. (Currently Amended) The composition according to Claim 1 Claim 7, wherein said gums derived from exudates are chosen from gum arabic, ghatti gum, karaya gum, gum tragacanth, carrageenan gum, agar gum and carob gum.
- 10. (Original) The composition according to Claim 1, wherein said at least one cationic direct dye of formula (I) is chosen from compounds of formulae (I 1) to (I 54) below:

$$CH_3$$
 $N = N$ 
 $N = N$ 
 $CH_3$ 
 $CI^*$ 
 $CH_3$ 
 $CI^*$ 
 $CH_3$ 

$$\begin{array}{c|c}
CH_3 \\
N + \\
CH_3
\end{array}$$

$$CH_3 CI CH_3$$

$$CH_3 CI CH_3$$

$$H_3C-N+$$
 $CH=CH CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$CH_3$$
 $CH_3$ 
 $CH_3$ 

$$H_3C-N_+$$
  $CH=CH-CH_3$   $CI^-$  (15)

$$HO-H_4C_2-N+$$
 $CH=CH CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$H_3C-N+$$
 $CH=CH CH_3$ 
 $CI$ 
 $CH_3$ 

$$CH_3 \qquad CH_3 \qquad CI \qquad (18)$$

$$CH_3 \qquad CH_3 \qquad CI \qquad (19)$$

$$CH_3 \qquad CH_3 \qquad CI \qquad (19)$$

$$CH_3$$
 $N+$ 
 $N=N$ 
 $OCH_3$ 
 $OCH_3$ 
 $OCH_3$ 

$$\begin{array}{c|c}
CH_3 \\
N+ \\
N=N- \\
C_2H_5
\end{array}$$

$$C_2H_5 \\
CH_3$$

$$C_2H_5$$

$$CH_3$$
 $N+$ 
 $N=N$ 
 $C_2H_4$ -CN
 $C_2H_4$ -CN
 $C_2H_4$ -CN
 $C_2H_4$ -CN

$$\begin{array}{c|c}
CH_3 \\
N+ \\
N\\
CH_3
\end{array}$$

$$\begin{array}{c|c}
N+ \\
CH_3
\end{array}$$

$$\begin{array}{c}
CI \\
(114)
\end{array}$$

$$CH_3$$
 $N+$ 
 $N=N$ 
 $CH_3$ 
 $CH_$ 

$$H_3C$$
 $N+$ 
 $N=N$ 
 $N=N$ 
 $C_2H_5$ 
 $C_2H_5$ 

$$\begin{array}{c}
CH_3 \\
N+\\
N+\\
N+\\
CH_3
\end{array}$$

$$CH_3 \\
CH_3$$

$$CH_3$$

$$CH_3$$
 $N=N-N-N$ 
 $C_2H_5$ 
 $CH_3$ 

$$N$$
 $N=N$ 
 $N=N$ 

$$CH_{3}$$
 $N=N$ 
 $N=N$ 
 $CH_{2}$ 
 $CH_{2}$ - $CH_{2}$ - $OH$ 
 $CH_{3}$ 

$$CH_3$$
 $N=N$ 
 $CH_2$ - $CH_2$ - $CN$ 
 $CH_3$ 

$$CH_3$$
 $CH_3$ 
 $CH_3$ 

$$CH_3$$
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$CH_3$$
 $CH_3$ 
 $CH_3$ 

$$\begin{array}{c|c}
 & \text{CH}_3 \\
 & \text{N+} \\
 & \text{N} = \text{N} \\
 & \text{N} = \text{N}
\end{array}$$
C1 (126)

$$CH_3$$
 $N+$ 
 $N=N$ 
 $CH_2$ 
 $CH_2$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$CH_3$$
  $O-CH_3$   $N+$   $N=N NH_2$   $CI$   $(128)$   $CH_3$   $O-CH_3$ 

$$CH_3$$
 $N+$ 
 $N=N$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$H_3C-N+$$
 $N=N CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$\begin{array}{c|c}
CH_3 \\
N \\
N+ \\
CH_3
\end{array}$$

$$CI \quad (131)$$

$$N = N - NH_2 \qquad CI \qquad (132)$$

$$N = N - CH_3$$

$$CH_3$$

$$\begin{array}{c|c} & CH_3 \\ \hline \\ CH_3 \\ \hline \\ CH_3 \\ \end{array} \qquad CI \qquad (133)$$

$$CH_3 - N + N = N - N - N - CH_3 - C$$

$$N = N +$$
 $N = N +$ 
 $N = N +$ 

$$N = N - NH_2 \qquad CI \qquad (136)$$

$$N = N + CH_3 \qquad CI$$

$$H_3C$$

$$O$$

$$N+$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$N = N - V - CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$N = N - N = N - CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$
 $N = N$ 
 $N = N$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$CH_3$$
 $N+$ 
 $N=N$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$CH_3$$
 $N+$ 
 $N=N$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$CH_3$$
 $N+$ 
 $N=N$ 
 $CH_3$ 
 $CH_$ 

$$V_{S}^{C_{2}H_{5}}$$
 $V_{S}^{CH_{3}}$ 
 $V_{CH_{3}}^{CH_{3}}$ 
 $V_{CH_{3}}^{CH_{3}}$ 
 $V_{CH_{3}}^{CH_{3}}$ 
 $V_{CH_{3}}^{CH_{3}}$ 
 $V_{CH_{3}}^{CH_{3}}$ 

$$\begin{array}{c|c}
CH_3 \\
N+\\
N=\\
N\\
CH_3
\end{array}$$
CI (150)

$$CH_3$$
 $N+$ 
 $N=N$ 
 $O-CH_3$ 
 $O-CH_3$ 
 $O-CH_3$ 
 $O-CH_3$ 
 $O-CH_3$ 
 $O-CH_3$ 

$$CH_3$$
 $N+$ 
 $CH_2-CH_2-CN$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

- 11. (Original) The composition according to Claim 10, wherein said at least one cationic direct dye is chosen from said compounds of formulae (I1), (I2), (I14) and (I31).
- 12. (Original) The composition according to Claim 1, wherein said at least one cationic direct dye of formula (II) is chosen from compounds of formulae (II1) to (II9) below:

$$H_3C$$
 $N=N$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$CH_3-N+$$

$$N=N$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$CH_3$$

$$H_3C$$
 $N+$ 
 $N=N$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

$$H_3C$$
 $N+$ 
 $N=N$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3SO_4$  (II5)

$$H_3C$$
 $N$ 
 $N+$ 
 $N+$ 
 $N=N$ 
 $N=N$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

13. (Original) The composition according to Claim 1, wherein said at least one cationic direct dye of formula (III) is chosen from compounds of formulae (III1) to (III18) below:

$$\begin{array}{c|c} & & & \\ &$$

$$H_3C$$
 $N$ 
 $CH=N-N$ 
 $CH_3$ 
 $CH_3$ 
 $CI$ 
 $CI$ 
 $CI$ 
 $CI$ 

$$H_3C$$
 $O$ 
 $CH=N-N$ 
 $CH_3$ 
 $C$ 

$$H_3C-N+$$
  $CH=N-N CH_3SO_4$  (1114)

$$H_3C-N+$$
 $CH=N-N$ 
 $CH_3$ 
 $CI$ 
 $(III5)$ 

$$H_3C-N+$$
  $CH=N-N$   $CH_3SO_4$  (III6)

$$CH_3$$
 $CH_3$ 
 $CH_3$ 

$$H_3C-N+$$
 $CH=N-N$ 
 $CH_3$ 
 $CI$ 
 $CI$ 
 $CIII8)$ 

$$CH=N-N$$

$$CH_3$$

$$CH_3$$

$$CH_3SO_4$$

$$CH_3SO_4$$

$$CH_3SO_4$$

$$CH=N-N$$
 $CH_3SO_4$  (III11)

$$CH = N - N - CI \quad CH_3SO_4 \quad (III12)$$

$$CH_3$$

$$H_3C-N+$$
  $CH=N-N CH_3$   $CH_3SO_4$  (III13)

$$H_3C-N+$$
 $CH=N-N$ 
 $CH_3$ 
 $CI^-$  (III17)
 $CH_3$ 
 $CI^-$  and

$$CI$$
 $N=N$ 
 $N=N$ 
 $N+$ 
 $CH_3$ 
 $CI$ 
 $CI$ 
 $(III18)$ 

- 14. (Original) The composition according to Claim 13, wherein said at least one cationic direct dye of formula (III) is chosen from compounds of formulae (III4), (III5) and (III13).
  - 15. (Original) The composition according to Claim 1, wherein said at least

one cationic direct dye of formula (III') is chosen from compounds of formulae (III'1) to (III'3) below:

CH<sub>3</sub>

- 16. (Original) The composition according to Claim 1, wherein said at least one cationic direct dye of formula (I), (II) or (III') is present in an amount ranging from 0.001 to 10% by weight relative to the total weight of the composition.
- 17. (Original) The composition according to Claim 16, wherein said at least one cationic direct dye of formula (I), (II) or (III') is present in an amount ranging from 0.005 to 5% by weight relative to the total weight of the composition.
- 18. (Currently Amended) The composition according to Claim 1 Claim 7, wherein said at least one thickening polymer is chosen from hydroxyalkylcelluloses.
- 19. (Original) The composition according to Claim 18, wherein said hydroxyalkylcelluloses are chosen from hydroxyethylcelluloses and hydroxypropylcelluloses.
- 20. (Currently Amended) The composition according to Claim 1 Claim 7, wherein said at least one thickening polymer is chosen from carboxyalkylcelluloses.
- 21. (Original) The composition according to Claim 20, wherein said carboxyalkylcelluloses are carboxymethylcelluloses.
- 22. (Original) The composition according to Claim 1, wherein said at least one thickening polymer is a nonionic guar gum modified with  $C_1$ - $C_6$  hydroxyalkyl groups.
- 23. (Original) The composition according to Claim 22, wherein said hydroxyalkyl groups are chosen from hydroxymethyl, hydroxyethyl, hydroxypropyl and

hydroxybutyl groups.

- 24. (Original) The composition according to Claim 22, wherein said nonionic quar gum has a degree of hydroxyalkylation ranging from 0.4 to 1.2.
- 25. (Original) The composition according to Claim 1, wherein said at least one thickening polymer is present in an amount ranging from 0.01 to 10% by weight relative to the total weight of the composition.
- 26. (Original) The composition according to Claim 25, wherein said at least one thickening polymer is present in an amount ranging from 0.1 to 5% by weight relative to the total weight of the composition.
- 27. (Original) The composition according to Claim 1, wherein said composition further comprises a support chosen from water and a mixture of water and at least one organic solvent.
- 28. (Original) The composition according to Claim 1, wherein said composition has a pH ranging from 2 to 11.
- 29. (Original) The composition according to Claim 28, wherein said composition has a pH ranging from 5 to 10.
- 30. (Previously Presented) The composition according to Claim 1, wherein said composition further comprises at least one additional direct dye, different from said at least one cationic direct dye (i) as defined in claim 1.
- 31. (Original) The composition according to Claim 30, wherein said at least one additional direct dye is chosen from nitrobenzene dyes, anthraquinone dyes,

napthaquinone dyes, triarylmethane dyes, xanthene dyes and azo dyes.

- 32. (Original) The composition according to Claim 1, wherein said composition further comprises at least one oxidation base chosen from paraphenylenediamines, bis(phenyl)alkylenediamines, para-aminophenols, orthoaminophenols and heterocyclic bases.
- 33. (Original) The composition according to Claim 32, wherein said at least one oxidation base is present in an amount ranging from 0.0005 to 12% by weight relative to the total weight of the dye composition.
- 34. (Original) The composition according to Claim 33, wherein said at least one oxidation base is present in an amount ranging from 0.005 to 6% by weight relative to the total weight of the dye composition.
- 35. (Original) The composition according to Claim 32, wherein said composition further comprises at least one coupler chosen from metaphenylenediamines, meta-aminophenols, meta-diphenols and heterocyclic couplers.
- 36. (Original) The composition according to Claim 35, wherein said at least one coupler is present in an amount ranging from 0.0001 to 10% by weight relative to the total weight of the dye composition.
- 37. (Original) The composition according to Claim 36, wherein said at least one coupler is present in an amount ranging from 0.005 to 5% by weight relative to the total weight of the dye composition.
  - 38. (Original) The composition according to Claim 32, wherein said

composition further comprises at least one oxidizing agent.

- 39. (Original) The composition according to Claim 38, wherein said at least one oxidizing agent is chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts and enzymes.
- 40. (Original) The composition according to Claim 39, wherein said persalts are chosen from perborates and persulphates.
- 41. (Previously Presented) The composition according to Claim 39, wherein said enzymes are chosen from peroxidases, lactases, and two-electron oxidoreductases.
- 42. (Previously Presented) The composition according to Claim 1, wherein said at least one cationic direct dye and said at least one thickening polymer are present in said composition in an amount sufficient for lightening direct dyeing.
- 43. (Original) The composition according to Claim 1, wherein said composition further comprises at least one oxidizing agent.
- 44. (Original) The composition according to Claim 1, wherein said composition is in a form chosen from a liquid, a shampoo, a cream and a gel.
- 45. (Previously Presented) A process for dyeing keratin fibers, comprising applying at least one dye composition to said keratin fibers and developing for a period of time sufficient to achieve a desired coloration, wherein said at least one dye composition comprises:
  - (i) at least one cationic direct dye chosen from compounds of formulae (I), (II),

(III) and (III') below, and

(ii) at least one thickening polymer;

(a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A-D=D- \begin{array}{c} R'_3 \\ X \\ \end{array}$$
 $R_2$ 
(I)

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH<sub>2</sub> radicals; or

 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

 $R_3$  and  $R'_3$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:

, R <sub>4</sub>	A <sub>2</sub>	Ra-NNA-RA
R-+N	N-N+ R4 N R4 A5	N-N+  N R A B
R <sub>4</sub> R <sub>4</sub> R <sub>4</sub> ;	R <sub>4</sub> <sup>±N</sup> , N	R <sub>a</sub> -N <sub>N</sub> -N <sub>R</sub> -N <sub>A</sub>
N-N+R <sub>4</sub> A <sub>16</sub>	; R <sub>5</sub> N=N+ ;	R <sub>4</sub> O N+ R <sub>4</sub> A <sub>12</sub>
-N+ :	S R.	N N R <sub>4</sub>
	<b>A</b> 14	<b>~15</b>

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_5$  is chosen from  $C_1\text{-}C_4$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

**(b)** wherein said compounds of formula (II) are chosen from compounds of formula:

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

R<sub>8</sub> and R<sub>9</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

in which:

 $R_{10}$  is chosen from  $C_1\text{-}C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X^{-}$$

$$R_{15}$$

$$R_{15}$$

$$R_{16}$$

$$R_{16}$$

$$R_{16}$$

$$R_{16}$$

$$R_{17}$$

$$R_{18}$$

$$R_{18}$$

in which:

R<sub>13</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, halogen atoms and an amino radical,

R<sub>14</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkyl radicals or forms, with a carbon

atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one to radical chosen from  $C_1$ - $C_4$  alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

and

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

## and

- (d) wherein said at least one thickening polymer is chosen from:
- (ii)<sub>1</sub> nonionic guar gums;
- (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
- (ii)<sub>3</sub> gums derived from plant exudates;
- (ii)<sub>4</sub> pectins;
- (ii)<sub>5</sub> alginates;
- (ii)<sub>6</sub> starches; and
- (ii)<sub>7</sub> hydroxyalkylcelluloses and carboxyalkylcelluloses, with the provisos that
- (1) when said at least one cationic direct dye is chosen from compounds of formula (I) wherein:
  - both D's are simultaneously nitrogen atoms,
  - $R_3$  and  $R'_3$  are simultaneously hydrogen atoms,
  - R<sub>1</sub> and R<sub>2</sub> are simultaneously unsubstituted methyl radicals, and
  - A is A<sub>6</sub> wherein R<sub>4</sub> is an unsubstituted methyl radical, or
  - (2) when said at least one cationic direct dye is chosen from compounds of

## formula (III) wherein:

- D<sub>1</sub> and D<sub>2</sub> are simultaneously nitrogen atoms,
- m is zero,
- R<sub>15</sub> is a hydrogen atom,
- R<sub>13</sub> is a dimethylamino radical, and
- E is  $E_8$  wherein R' is an unsubstituted methyl group,

then the at least one thickening polymer is not chosen from at least one nonionic guar gum; and

with the further provisos that

- (1) when said at least one cationic direct dye is chosen from compounds of formula (I) wherein:
  - both D's are simultaneously nitrogen atoms, and
  - A is chosen from A<sub>4</sub> and A<sub>13</sub>, or
- (2) when said at least one cationic direct dye is chosen from compounds of formula (III) wherein:
  - $D_1$  and  $D_2$  are simultaneously nitrogen atoms,
  - m is zero, and
  - E is chosen from E<sub>1</sub>, E<sub>2</sub>, and E<sub>7</sub>,

then said at least one thickening polymer is not chosen from hydroxyalkylcelluloses and carboxyalkylcelluloses.

46. (Original) The process according to Claim 45, wherein said process further comprises rinsing said fibers, then drying said fibers.

47. (Original) The process according to Claim 45, wherein said process further comprises rinsing said fibers, washing said fibers with shampoo, a second rinsing of said fibers and drying of said fibers.

48. (Previously Presented) A process for dyeing keratin fibers, comprising separately storing a first composition, separately storing a second composition, thereafter mixing said first and second compositions, applying said mixture to said fibers, and developing for a period of time sufficient to achieve a desired coloration,

- wherein said first composition comprises at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below, at least one thickening polymer and at least one oxidation base,
  - (a) wherein said compounds of formula (I) are chosen from compounds of

$$A - D = D - \begin{pmatrix} R'_3 \\ N \\ R_2 \end{pmatrix} \qquad (1)$$

formula:

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted

with a radical chosen from -CN, -OH and -NH $_2$  radicals; or  $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen,

which can be substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

 $R_3$  and  $R'_3$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:

R <sub>4</sub> A <sub>1</sub>	H <sub>A</sub> A <sub>2</sub>	R <sub>4</sub> -N <sub>N</sub> -N <sub>A</sub>
R_4_N	N-N <sub>+</sub> R <sub>4</sub> N-N <sub>+</sub> R <sub>4</sub> A <sub>5</sub>	N-N+  N-N+  R <sub>4</sub> A <sub>6</sub>
R <sub>4</sub> , R <sub>4</sub> , R <sub>4</sub> , N+ , N	R <sub>4</sub> +N, N R <sub>4</sub>	R <sub>4</sub> R <sub>4</sub> N  R <sub>4</sub> A <sub>8</sub>
N-N+R4 A <sub>10</sub>	N=N+ R <sub>5</sub>	R <sub>4</sub> O.N+ R <sub>4</sub> A <sub>12</sub>
	S R <sub>4</sub>	N N+ R <sub>4</sub>

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and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_{5}$  is chosen from  $C_{1}\hbox{-} C_{4}$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of

formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \\ \end{array}$$

$$R_7$$

$$R_7$$

$$(II)$$

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

$$R_{10}$$
 $R_{10}$ 
 $R$ 

in which:

 $R_{10}$  is chosen from  $C_1\hbox{-} C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X \cdot R_{15}$$

$$R_{15}$$

$$R_{15}$$

$$R_{15}$$

$$R_{15}$$

$$R_{15}$$

$$R_{15}$$

$$R_{15}$$

in

which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkoxy radicals, halogen atoms and an amino radical,

R<sub>14</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkyl radicals or forms, with a carbon

atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

and

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

- and wherein said at least one thickening polymer is chosen from:
- (ii)<sub>1</sub> nonionic guar gums;
- (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;

(ii)3 - gums derived from plant exudates;

(ii)<sub>4</sub> - pectins;

(ii)<sub>5</sub> - alginates;

(ii)<sub>6</sub> - starches; and

(ii)<sub>7</sub> - hydroxyalkylcelluloses and carboxyalkylcelluloses; and wherein said second composition comprises at least one oxidizing agent.

- 49. (Previously Presented) A process for dyeing keratin fibers, comprising separately storing a first composition, separately storing a second composition, thereafter mixing said first and second compositions, applying said mixture to said fibers, and developing for a period of time sufficient to achieve a desired coloration, wherein said first composition comprises at least one oxidation base, and at least one oxidation base.
- wherein said first composition comprises at least one oxidation base, and at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below:
- (a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - \begin{cases} R_{1} \\ R_{2} \end{cases}$$

$$(1)$$

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or  $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures A<sub>1</sub> to A<sub>19</sub> below:

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	R <sub>4</sub> A <sub>1</sub>	+N R <sub>4</sub> A <sub>2</sub>	R₄	-NN R <sub>4</sub> A <sub>3</sub>
$A_{10}$ $A_{10}$ $A_{10}$ $A_{10}$ $A_{11}$ $A_{12}$ $A_{12}$ $A_{13}$ $A_{14}$ $A_{15}$ $A_{17}$ $A_{18}$ $A_{19}$ $A_{11}$ $A_{12}$ $A_{12}$ $A_{13}$ $A_{14}$ $A_{15}$ $A_{17}$ $A_{18}$ $A_{19}$ $A_{11}$ $A_{12}$ $A_{12}$	RN	N-N <sub>+</sub> R <sub>4</sub> N-N <sub>+</sub> R <sub>4</sub> A <sub>5</sub>	; <u>"</u>	R <sub>4</sub> -N+ N R <sub>4</sub> A <sub>6</sub>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	R <sub>4</sub> , R <sub></sub>	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	R <sub>4</sub> + // \  R <sub>4</sub> - N \  R <sub>4</sub> - N \  R <sub>4</sub> A <sub>9</sub>	
R <sub>4</sub>		R <sub>5</sub> N=N+  A <sub>11</sub>	F	
A <sub>13</sub> A <sub>14</sub> A <sub>15</sub>	R <sub>4</sub>		<b>.</b>	s ;

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_5$  is chosen from  $C_1\text{-}C_4$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of

formula:

$$B-N=N- \begin{array}{c} R_{8} \\ \hline \\ X \\ \hline \end{array}$$

$$\begin{array}{c} R_{7} \\ \hline \\ R_{7} \\ \end{array}$$

$$(II)$$

in which:

 $R_6$  is chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:

$$R_{10}$$
  $R_{10}$   $R_{10}$   $R_{10}$   $R_{11}$   $R_{12}$   $R_{12}$   $R_{13}$   $R_{14}$   $R_{15}$   $R$ 

$$R_{10}$$
  $R_{10}$   $R$ 

in which:

 $R_{10}$  is chosen from  $C_1\text{-}C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X \cdot R_{15}$$

$$R_{15}$$

$$R_{16}$$
(III)
$$R_{16}$$

in

which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkoxy radicals, halogen atoms and an amino radical,

R<sub>14</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkyl radicals or forms, with a carbon

atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

and

and

in which  $R^{\iota}$  is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

- wherein said second composition comprises at least one oxidizing agent and at least one thickening polymer,

wherein said at least one thickening polymer is chosen from:

- (ii)<sub>1</sub> nonionic guar gums;
- (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
- (ii)<sub>3</sub> gums derived from plant exudates;
- (ii)<sub>4</sub> pectins;
- (ii)<sub>5</sub> alginates;
- (ii)<sub>6</sub> starches; and
- (ii)7 hydroxyalkylcelluloses and carboxyalkylcelluloses.
- 50. (Previously Presented) A process for dyeing keratin fibers, comprising separately storing a first composition, separately storing a second composition,

thereafter mixing said first and second compositions,

applying said mixture to said fibers, and

developing for a period of time sufficient to achieve a desired coloration,

- wherein said first composition comprises at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below and at least one thickening polymer:

(a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - \begin{cases} R'_{3} \\ N \\ R_{2} \end{cases}$$
 (I)

## in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or  $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

 $R_3$  and  $R_3$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	; ;
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	;
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	; ·
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	R <sub>4</sub>

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and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_5$  is chosen from  $C_1\text{-}C_4$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of

formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \\ R_7 \end{array}$$

$$(11)$$

in which:

 $R_6$  is chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

$$R_{10}$$
 $R_{10}$ 
 $R$ 

in which:

 $R_{10}$  is chosen from  $C_1\text{-}C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X \cdot R_{15}$$

$$R_{15}$$

$$R_{16}$$
(III)

in

which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1\text{-}C_4$  alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1\text{-}C_4$  alkyl radicals or forms, with a carbon

atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

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and

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

- wherein said at least one thickening polymer is chosen from:
  - (ii)<sub>1</sub> nonionic guar gums;
  - (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;

(ii)<sub>3</sub> - gums derived from plant exudates;

- (ii)<sub>4</sub> pectins;
- (ii)<sub>5</sub> alginates;
- (ii)<sub>6</sub> starches; and
- (ii)<sub>7</sub> hydroxyalkylcelluloses and carboxyalkylcelluloses; and
- wherein said second composition comprises at least one oxidizing agent.
  - 51. (Previously Presented) A process for dyeing keratin fibers, comprising separately storing a first composition, separately storing a second composition, thereafter mixing said first and second compositions, applying said mixture to said fibers, and
- wherein said first composition comprises at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below:

developing for a period of time sufficient to achieve a desired coloration,

(a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - \begin{pmatrix} R_3 \\ R_3 \end{pmatrix} - N \begin{pmatrix} R_1 \\ R_2 \end{pmatrix}$$
 (I)

in which:

D is chosen from a nitrogen atom and a -CH group,

R<sub>1</sub> and R<sub>2</sub>, which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and C<sub>1</sub>-C<sub>4</sub> alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH<sub>2</sub> radicals; or R<sub>1</sub> and R<sub>2</sub> form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

 $R_3$  and  $R_3$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:

R <sub>4</sub> N  R <sub>4</sub> A <sub>1</sub>	P <sub>4</sub> A <sub>2</sub>	, R	R <sub>4</sub>
R <sub>4</sub> -N	R <sub>4</sub> N-N <sub>+</sub> R <sub>4</sub> R <sub>4</sub> A <sub>5</sub>	:	N-N+ N-R <sub>4</sub> A <sub>6</sub>
R <sub>4</sub> , R <sub>4</sub> N+ R <sub>4</sub> , R <sub>4</sub> A <sub>7</sub>	R <sub>4</sub> +N, N R <sub>4</sub>	R <sub>4</sub> /// R <sub>4</sub> N N R	:
N, N+ R4 A10	$R_{5} \stackrel{N=N}{\longleftarrow}$ $A_{11}$	,R <sub>4</sub> + 	R <sub>4</sub> O.N+ R <sub>4</sub> A <sub>12</sub>
R <sub>4</sub> A <sub>13</sub>	S A <sub>14</sub>	R <sub>4</sub>	N—N+R <sub>4</sub> S A <sub>15</sub>

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

R<sub>5</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of

formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \\ R_7 \end{array}$$
 (II)

in which:

 $R_6$  is chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

$$R_{10}$$
 $R_{10}$ 
 $R$ 

in which:

 $R_{10}$  is chosen from  $C_1\text{-}C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X \cdot R_{15}$$

$$R_{15}$$

$$R_{16}$$

$$R_{16}$$

$$R_{16}$$

$$R_{16}$$

in

which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkoxy radicals, halogen atoms and an amino radical,

R<sub>14</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkyl radicals or forms, with a carbon

atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

and

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

wherein when m is 0 and when D<sub>1</sub> represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

- wherein said second composition comprises at least one oxidizing agent and at least one thickening polymer,
- wherein said at least one thickening polymer is chosen from:

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(ii)<sub>1</sub> - nonionic guar gums;

(ii)2 - biopolysaccharide gums of microbial origin;

(ii)<sub>3</sub> - gums derived from plant exudates;

(ii)<sub>4</sub> - pectins;

(ii)<sub>5</sub> - alginates;

(ii)<sub>6</sub> - starches; and

(ii)<sub>7</sub> - hydroxyalkylcelluloses and carboxyalkylcelluloses.

52. (Previously Presented) A multi-compartment dyeing kit, comprising at least two separate compartments, wherein a first compartment contains a first composition and a second compartment contains a second composition,

- wherein said first composition comprises at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below, at least one thickening polymer and at least one oxidation base:
- (a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - \begin{pmatrix} R_1 \\ R_3 \end{pmatrix} - N \begin{pmatrix} R_1 \\ R_2 \end{pmatrix}$$
 (I)

in which:

D is chosen from a nitrogen atom and a -CH group,

R<sub>1</sub> and R<sub>2</sub>, which may be identical or different, are chosen from a hydrogen atom;

a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH<sub>2</sub> radicals; or  $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

 $R_3$  and  $R'_3$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

## A is chosen from structures $A_1$ to $A_{19}$ below:

R <sub>4</sub> A <sub>1</sub>	+N A <sub>2</sub>	R <sub>4</sub> -N <sub>N</sub> -N
R_4^+\;	N-N+ R <sub>4</sub> // <sub>N</sub> R <sub>4</sub> A <sub>5</sub>	$ \begin{array}{c} N-N+\\ \parallel\\ N\\ R_4\\ A_6 \end{array} $
$ \begin{array}{cccc} R_4 & R_4 \\ R_4 & N \\ R_4 & R_4 \end{array} $	R <sub>4</sub> +N <sub>N</sub> R <sub>4</sub>	R <sub>4</sub> R <sub>4</sub> N  R <sub>4</sub> A <sub>9</sub>
N-N+R <sub>4</sub>	N=N+ R <sub>5</sub> ————————————————————————————————————	R <sub>4</sub> O. N+ R <sub>4</sub> A <sub>12</sub>
=N <sup>+</sup> ;	S A <sub>14</sub>	; N N R <sub>4</sub>

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_5$  is chosen from  $C_1\text{-}C_4$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \end{array} \begin{array}{c} R_7 \\ \hline \\ R_7 \end{array}$$
 (II)

in which:

 $R_6$  is chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures B<sub>1</sub> to B<sub>6</sub> below:

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

in which:

 $R_{10}$  is chosen from  $C_1\text{-}C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X \cdot R_{15}$$

$$R_{16}$$

$$(III')$$

$$(III')$$

in

which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkoxy radicals, halogen atoms and an amino radical,

R<sub>14</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkyl radicals or forms, with a carbon

atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

 $\quad \text{and} \quad$ 

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

- wherein said at least one thickening polymer is chosen from:
  - (ii)<sub>1</sub> nonionic guar gums;
  - (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;

(ii)<sub>3</sub> - gums derived from plant exudates;

(ii)<sub>4</sub> - pectins;

(ii)<sub>5</sub> - alginates;

(ii)<sub>6</sub> - starches; and

- (ii)7 hydroxyalkylcelluloses and carboxyalkylcelluloses; and
- wherein said second composition comprises at least one oxidizing agent.
- 53. (Previously Presented) A multi-compartment dyeing kit, comprising at least two separate compartments, wherein a first compartment contains a first composition and a second compartment contains a second composition,
- wherein said first composition comprises at least one oxidation base and at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below:
- (a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A \longrightarrow D \longrightarrow D \longrightarrow R_3$$

$$X \longrightarrow R_2$$

$$R_2$$

$$(1)$$

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH<sub>2</sub> radicals; or

 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

 $R_3$  and  $R'_3$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:

R <sub>4</sub> A <sub>1</sub>	R <sub>4</sub>	R <sub>4</sub> -N <sub>N</sub> -N <sub>N</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub>
R <sub>4</sub> -N	N-N+ R <sub>4</sub> N R <sub>4</sub> A <sub>5</sub>	N-N+ N-N+ N-N+ N-N+ N-N+ N-N+ N-N+ N-N+
$ \begin{array}{cccc} R_4 & R_4 \\ \hline N+ & \\ R_4 & \\ R_4 & \\ A_7 \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	R <sub>4</sub> N N R <sub>4</sub> A <sub>8</sub>
N N R <sub>4</sub>	$R_{5} \xrightarrow{N=N+} R_{4}$ $A_{11}$	R <sub>4</sub> O. N+ R <sub>4</sub> A <sub>12</sub>
=N+ R <sub>4</sub> A <sub>13</sub>	; A <sub>14</sub>	N N R <sub>4</sub>

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and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

R<sub>5</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of

formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \end{array} \begin{array}{c} R_7 \\ \hline \\ R_7 \end{array}$$
 (II)

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

$$R_{10}$$
 $R_{10}$ 
 $R$ 

in which:

R<sub>10</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1} = D_{2} - (N)_{m} - R_{13}$$

$$X \cdot R_{15} - R_{15$$

in

which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1\text{-}C_4$  alkoxy radicals, halogen atoms and an amino radical,

R<sub>14</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkyl radicals or forms, with a carbon

atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

and

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

- wherein said second composition comprises at least one oxidizing agent and at least one thickening polymer,
- wherein said at least one thickening polymer is chosen from:

(ii)<sub>1</sub> - nonionic guar gums;

(ii)<sub>2</sub> - biopolysaccharide gums of microbial origin;

(ii)<sub>3</sub> - gums derived from plant exudates;

(ii)<sub>4</sub> - pectins;

(ii)<sub>5</sub> - alginates;

(ii)<sub>6</sub> - starches; and

(ii)7 - hydroxyalkylcelluloses and carboxyalkylcelluloses.

- 54. (Previously Presented) A multi-compartment dyeing kit, comprising at least two separate compartments, wherein a first compartment contains a first composition and a second compartment contains a second composition,
- wherein said first composition comprises at least one thickening polymer and at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below:
- (a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - \begin{pmatrix} R'_{3} \\ N \\ R_{2} \end{pmatrix} - \begin{pmatrix} R_{1} \\ R_{2} \end{pmatrix}$$
 (I)

in which:

D is chosen from a nitrogen atom and a -CH group,

R<sub>1</sub> and R<sub>2</sub>, which may be identical or different, are chosen from a hydrogen atom;

a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH<sub>2</sub> radicals; or  $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:

R <sub>4</sub> A <sub>1</sub>	+N	R <sub>4</sub> -N <sub>N</sub> -N <sub>N</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub>
R_+\_\\	N-N+ R <sub>4</sub> N R <sub>4</sub> A <sub>5</sub>	N-N+ N-N+ N N N R <sub>4</sub> A <sub>6</sub>
$ \begin{array}{cccc} R_4 & R_4 \\ \hline R_4 & N+ \\ R_4 & R_4 \end{array} $ $ \begin{array}{cccc} R_4 & R_4 \\ R_4 & R_4 \end{array} $	R <sub>4</sub> + N, N R <sub>4</sub> R <sub>4</sub> A <sub>8</sub>	R <sub>4</sub> R <sub>4</sub> N  R <sub>4</sub> A <sub>9</sub>
N-N+R <sub>4</sub>	$R_{5} \xrightarrow{N=N+} R_{4}$ $A_{11}$	R <sub>4</sub> O N+ R <sub>4</sub> A <sub>12</sub>
R <sub>4</sub>	S R.	N—N+R <sub>4</sub> S A <sub>15</sub>

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_5$  is chosen from  $C_1\text{-}C_4$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of

formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \\ \end{array}$$

$$R_7$$

$$R_7$$

$$R_7$$

$$R_7$$

$$R_7$$

in which:

 $R_6$  is chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

$$R_{10}$$
 $R_{10}$ 
 $R$ 

in which:

R<sub>10</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X \cdot R_{15}$$

$$R_{16}$$

$$(III)$$

$$(III')$$

in

which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1\text{-}C_4$  alkoxy radicals, halogen atoms and an amino radical,

R<sub>14</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkyl radicals or forms, with a carbon

atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

and

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from  $C_1$ - $C_4$  alkyl radicals;

- wherein said at least one thickening polymer is chosen from:
  - (ii)<sub>1</sub> nonionic guar gums;
  - (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;

(ii)<sub>3</sub> - gums derived from plant exudates;

- (ii)<sub>4</sub> pectins;
- (ii)<sub>5</sub> alginates;
- (ii)<sub>6</sub> starches; and
- (ii)7 hydroxyalkylcelluloses and carboxyalkylcelluloses; and
- wherein said second composition comprises at least one oxidizing agent.
- 55. (Previously Presented) A multi-compartment dyeing kit, comprising at least two separate compartments, wherein a first compartment contains a first composition and a second compartment contains a second composition,
- wherein said first composition comprises at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below:
- (a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - \begin{pmatrix} R'_3 \\ R_1 \end{pmatrix} - \begin{pmatrix} R_1 \\ R_2 \end{pmatrix}$$
 (I)

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH<sub>2</sub> radicals; or

 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:

R <sub>4</sub> A <sub>1</sub>	R <sub>4</sub>	R <sub>4</sub> -N <sub>N</sub> -N <sub>A</sub>
R <sub>4</sub> -N A <sub>4</sub>	N-N+ R <sub>4</sub> // <sub>N</sub> R <sub>4</sub> A <sub>5</sub>	N-N+ N-N+ N-N+ N-N+ N-N+ N-N+ N-N+ N-N+
$ \begin{array}{c} R_4 & R_4 \\ R_4 & N+ \\ R_4 & R_4 \\ R_4 & R_7 \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	R <sub>4</sub> N N R <sub>4</sub> A <sub>9</sub>
N, N+ R <sub>4</sub> A <sub>10</sub>	$R_{5} \xrightarrow{N=N+} A_{11}$	R <sub>4</sub> O. N+ R <sub>4</sub> A <sub>12</sub>
=N+ R <sub>4</sub>	N+ R <sub>4</sub>	; N N R <sub>4</sub>

and

in which:

 $R_4$  is chosen from  $C_1$ - $C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

R<sub>5</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of

formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \end{array} \begin{array}{c} R_7 \\ \hline \\ R_7 \end{array}$$
 (II)

in which:

 $R_6$  is chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

in which:

R<sub>10</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals, and

R<sub>11</sub> and R<sub>12</sub>, which may be identical or different, are chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1} = D_{2} - (N)_{m} - R_{13}$$

$$X \cdot R_{15} - R_{15}$$

$$(III)$$

$$(III')$$

in

which:

R<sub>13</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16} \ \text{and} \ R_{17},$  which may be identical or different, are chosen from a hydrogen

atom and C1-C4 alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

**E3** 

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

E4

**E**5

and

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

- wherein said second composition comprises at least one oxidizing agent and at least one thickening polymer,

wherein said at least one thickening polymer is chosen from:

- (ii)<sub>1</sub> nonionic guar gums;
- (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
- (ii)<sub>3</sub> gums derived from plant exudates;
- $(ii)_4$  pectins;
- (ii) $_5$  alginates;
- (ii)<sub>6</sub> starches; and
- (ii)7 hydroxyalkylcelluloses and carboxyalkylcelluloses.